

特許協力条約

PCT

特許性に関する国際予備報告（特許協力条約第二章）

（法第 12 条、法施行規則第 56 条）

〔PCT36 条及び PCT 規則 70〕

出願人又は代理人 の書類記号 04R00130	今後の手続きについては、様式 PCT/IPEA/416 を参照すること。	
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国際特許分類 (IPC) Int.Cl. ⁷ G09G3/36, G02F1/133		
出願人 (氏名又は名称) シャープ株式会社		

<p>1. この報告書は、PCT35 条に基づきこの国際予備審査機関で作成された国際予備審査報告である。 法施行規則第 57 条 (PCT36 条) の規定に従い送付する。</p> <p>2. この国際予備審査報告は、この表紙を含めて全部で <u>3</u> ページからなる。</p> <p>3. この報告には次の附属物件も添付されている。</p> <p>a. <input checked="" type="checkbox"/> 附属書類は全部で <u>12</u> ページである。</p> <p><input checked="" type="checkbox"/> 補正されて、この報告の基礎とされた及び／又はこの国際予備審査機関が認めた訂正を含む明細書、請求の範囲及び／又は図面の用紙 (PCT 規則 70.16 及び実施細則第 607 号参照)</p> <p><input type="checkbox"/> 第 I 欄 4. 及び補充欄に示したように、出願時における国際出願の開示の範囲を超えた補正を含むものとこの国際予備審査機関が認定した差替え用紙</p> <p>b. <input type="checkbox"/> 電子媒体は全部で _____ (電子媒体の種類、数を示す)。 配列表に関する補充欄に示すように、コンピュータ読み取り可能な形式による配列表又は配列表に関連するテーブルを含む。 (実施細則第 802 号参照)</p>	
<p>4. この国際予備審査報告は、次の内容を含む。</p> <p><input checked="" type="checkbox"/> 第 I 欄 国際予備審査報告の基礎</p> <p><input type="checkbox"/> 第 II 欄 優先権</p> <p><input checked="" type="checkbox"/> 第 III 欄 新規性、進歩性又は産業上の利用可能性についての国際予備審査報告の不作成</p> <p><input type="checkbox"/> 第 IV 欄 発明の単一性の欠如</p> <p><input type="checkbox"/> 第 V 欄 PCT35 条 (2) に規定する新規性、進歩性又は産業上の利用可能性についての見解、それを裏付けるための文献及び説明</p> <p><input type="checkbox"/> 第 VI 欄 ある種の引用文献</p> <p><input type="checkbox"/> 第 VII 欄 国際出願の不備</p> <p><input type="checkbox"/> 第 VIII 欄 国際出願に対する意見</p>	

国際予備審査の請求書を受理した日 10.12.2004	国際予備審査報告を作成した日 28.06.2005		
名称及びあて先 日本国特許庁 (IPEA/J P) 郵便番号 100-8915 東京都千代田区霞が関三丁目 4 番 3 号	特許庁審査官 (権限のある職員) 西島 篤宏	2 G	9308
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様式 PCT/IPEA/409 (表紙) (2004 年 1 月)

第 I 欄 報告の基礎

1. この国際予備審査報告は、下記に示す場合を除くほか、国際出願の言語を基礎とした。

☐ この報告は、_____ 語による翻訳文を基礎とした。
それは、次の目的で提出された翻訳文の言語である。

- ☐ PCT規則12.3及び23.1(b)にいう国際調査
☐ PCT規則12.4にいう国際公開
☐ PCT規則55.2又は55.3にいう国際予備審査

2. この報告は下記の出願書類を基礎とした。(法第6条(PCT14条)の規定に基づく命令に応答するために提出された差替え用紙は、この報告において「出願時」とし、この報告に添付していない。)

☐ 出願時の国際出願書類

☒ 明細書

第 1-68 _____ ページ、出願時に提出されたもの

第 _____ ページ*、_____ 付けで国際予備審査機関が受理したもの

第 _____ ページ*、_____ 付けで国際予備審査機関が受理したもの

☒ 請求の範囲

第 _____ 項、出願時に提出されたもの

第 _____ 項*、PCT19条の規定に基づき補正されたもの

第 1-2, 7-9, 11-14, 17-19, 21-24 _____ 項*、10, 12, 2004 付けで国際予備審査機関が受理したもの

第 _____ 項*、_____ 付けで国際予備審査機関が受理したもの

☐ 図面

第 1-19 _____ ページ/図、出願時に提出されたもの

第 _____ ページ/図*、_____ 付けで国際予備審査機関が受理したもの

第 _____ ページ/図*、_____ 付けで国際予備審査機関が受理したもの

☐ 配列表又は関連するテーブル

配列表に関する補充欄を参照すること。

3. ☒ 補正により、下記の書類が削除された。

☐ 明細書 第 _____ ページ

☒ 請求の範囲 第 3-6, 10, 15-16, 20 _____ 項

☐ 図面 第 _____ ページ/図

☐ 配列表(具体的に記載すること) _____

☐ 配列表に関連するテーブル(具体的に記載すること) _____

4. ☐ この報告は、補充欄に示したように、この報告に添付されかつ以下に示した補正が出願時における開示の範囲を超えてされたものと認められるので、その補正がされなかったものとして作成した。(PCT規則70.2(c))

☐ 明細書 第 _____ ページ

☐ 請求の範囲 第 _____ 項

☐ 図面 第 _____ ページ/図

☐ 配列表(具体的に記載すること) _____

☐ 配列表に関連するテーブル(具体的に記載すること) _____

* 4. に該当する場合、その用紙に“superseded”と記入されることがある。

第Ⅲ欄 新規性、進歩性又は産業上の利用可能性についての見解の不作成

次に関して、当該請求の範囲に記載されている発明の新規性、進歩性又は産業上の利用可能性につき、次の理由により審査しない。

☐ 国際出願全体

☒ 請求の範囲 1-2, 7-9, 11-14, 17-19, 21-24

理由:

☐ この国際出願又は請求の範囲 _____ は、国際予備審査をすることを要しない次の事項を内容としている（具体的に記載すること）。

☐ 明細書、請求の範囲若しくは図面（次に示す部分）又は請求の範囲 _____ の記載が、不明確であるため、見解を示すことができない（具体的に記載すること）。

☐ 全部の請求の範囲又は請求の範囲 _____ が、明細書による十分な裏付けを欠くため、見解を示すことができない。

☒ 請求の範囲 1-2, 7-9, 11-14, 17-19, 21-24 _____ について、国際調査報告が作成されていない。

☐ ヌクレオチド又はアミノ酸の配列表が、実施細則の附属書C（塩基配列又はアミノ酸配列を含む明細書等の作成のためのガイドライン）に定める基準を、次の点で満たしていない。

書面による配列表が

☐ 提出されていない。

コンピュータ読み取り可能な形式による配列表が

☐ 所定の基準を満たしていない。

☐ 提出されていない。

☐ 所定の基準を満たしていない。

☐ コンピュータ読み取り可能な形式によるヌクレオチド又はアミノ酸の配列表に関連するテーブルが、実施細則の附属書Cの2に定める技術的な要件を、次の点で満たしていない。

☐ 提出されていない。

☐ 所定の技術的な要件を満たしていない。

☐ 詳細については補充欄を参照すること。

CLAIMS

1. (amended) A liquid crystal television receiver which corrects optical response characteristics of a liquid crystal panel by subjecting image data supplied to the liquid crystal display panel to enhancing conversion at least in accordance with image data of a directly previous vertical period and image data of a current vertical period,

the liquid crystal television receiver being capable of reproducing images based on image data of more than one broadcasting standard,

the liquid crystal television receiver comprising:

signal type detection means for detecting whether input image data is a video signal of a first broadcasting standard or a video signal of a second broadcasting standard, the video signal of the first broadcasting standard being different, in terms of a vertical frequency, from the video signal of the second broadcasting standard;

enhancing conversion means for subjecting the input image data to enhancing conversion in a direction of gray level transition;

temperature detection means for detecting a temperature in the liquid crystal television receiver; and

table memories that store enhancing conversion parameters that correspond to respective temperatures in the

liquid crystal television receiver and are specified by the image data of the current vertical period and the image data of the directly previous vertical period,

the enhancing conversion means including an operation
5 section that performs, using the enhancing conversion parameter read out from the table memories, an operation on the image data so as to enhance the image data, in accordance with a result of comparison between (i) a switching temperature determined by the result of the
10 detection by the signal type detection means and (ii) the result of the detection by the temperature detection means.

2. (amended) A liquid crystal television receiver which corrects optical response characteristics of a liquid crystal
15 panel by subjecting image data supplied to the liquid crystal display panel to enhancing conversion at least in accordance with image data of a directly previous vertical period and image data of a current vertical period,

the liquid crystal television receiver being capable of
20 reproducing images based on image data of more than one broadcasting standard,

the liquid crystal television receiver comprising:

signal type detection means for detecting whether input image data is a video signal of a first broadcasting standard
25 or a video signal of a second broadcasting standard, the video

signal of the first broadcasting standard being different, in terms of a vertical frequency, from the video signal of the second broadcasting standard;

enhancing conversion means for subjecting the input
5 image data to enhancing conversion in a direction of gray level transition;

temperature detection means for detecting a temperature in the liquid crystal television receiver; and

table memories that store enhancing conversion
10 parameters that correspond to respective temperatures in the liquid crystal television receiver and are specified by the image data of the current vertical period and the image data of the directly previous vertical period,

at least one of the table memories being referable
15 regardless of the signal type, and

the enhancing conversion means subjecting the image data to the enhancing conversion, using the enhancing conversion parameter read out from one of the table memories that is selected and referred to in accordance with the result
20 of detection by the signal type detection means and the result of detection by the temperature detection means.

3. (cancelled)

25 4. (cancelled)

5 (cancelled)

6. (cancelled)

5

7. (amended) A liquid crystal television receiver which corrects optical response characteristics of a liquid crystal panel by subjecting image data supplied to the liquid crystal display panel to enhancing conversion at least in accordance
10 with image data of a directly previous vertical period and image data of a current vertical period,

the liquid crystal television receiver being capable of reproducing images based on image data of more than one broadcasting standard,

15 the liquid crystal television receiver comprising:

signal type detection means for detecting whether input image data is a video signal of a first broadcasting standard or a video signal of a second broadcasting standard, the video signal of the first broadcasting standard being different, in
20 terms of a vertical frequency, from the video signal of the second broadcasting standard;

enhancing conversion means for subjecting the input image data to enhancing conversion in a direction of gray level transition;

25 temperature detection means for detecting a temperature

in the liquid crystal television receiver; and

a table memory that stores an enhancing conversion parameter specified by image data of a current vertical period and image data of a directly previous vertical period,

5 the enhancing conversion means including:

an operation section that performs an operation on the image data so as to enhance the image data, using the enhancing conversion parameter; and

a multiplying section that multiplies output data of the
10 operation section by a coefficient corresponding to the result of detection by the signal type detection means and the result of detection by the temperature detection means.

8. (amended) A liquid crystal television receiver which
15 corrects optical response characteristics of a liquid crystal panel by subjecting image data supplied to the liquid crystal display panel to enhancing conversion at least in accordance with image data of a directly previous vertical period and image data of a current vertical period,

20 the liquid crystal television receiver being capable of reproducing images based on image data of more than one broadcasting standard,

the liquid crystal television receiver comprising:

signal type detection means for detecting whether input
25 image data is a video signal of a first broadcasting standard

or a video signal of a second broadcasting standard, the video signal of the first broadcasting standard being different, in terms of a vertical frequency, from the video signal of the second broadcasting standard;

5 enhancing conversion means for subjecting the input image data to enhancing conversion in a direction of gray level transition;

temperature detection means for detecting a temperature in the liquid crystal television receiver;

10 a first table memory that stores an enhancing conversion parameter specified by the image data of the current vertical period and the image data of the directly previous vertical period, the first table memory being referred to when the input image data is the video signal of the first broadcasting
15 standard; and

a second table memory that stores an enhancing conversion parameter specified by the image data of the current vertical period and the image data of the directly previous vertical period, the second table memory being
20 referred to when the input image data is the video signal of the second broadcasting standard,

the enhancing conversion means including:

an operation section that performs, using the enhancing conversion parameter read out from the first or second table
25 memory in accordance with the result of the detection by the

signal type detection means, an operation on the image data so as to enhance the image data; and

a multiplying section that multiplies output data of the operation section by a coefficient corresponding to the result
5 of detection by the temperature detection means.

9. (amended) A liquid crystal television receiver which corrects optical response characteristics of a liquid crystal panel by subjecting image data supplied to the liquid crystal
10 display panel to enhancing conversion at least in accordance with image data of a directly previous vertical period and image data of a current vertical period,

the liquid crystal television receiver being capable of reproducing images based on image data of more than one
15 broadcasting standard,

the liquid crystal television receiver comprising:

signal type detection means for detecting whether input image data is a video signal of a first broadcasting standard or a video signal of a second broadcasting standard, the video
20 signal of the first broadcasting standard being different, in terms of a vertical frequency, from the video signal of the second broadcasting standard;

enhancing conversion means for subjecting the input image data to enhancing conversion in a direction of gray
25 level transition;

temperature detection means for detecting a temperature in the liquid crystal television receiver;

first table memories that store enhancing conversion parameters that correspond to respective temperatures in the liquid crystal television receiver and are specified by the image data of the current vertical period and the image data of the directly previous vertical period, the first table memories being referred to when the input image data is the video signal of the first broadcasting standard; and

second table memories that store enhancing conversion parameters that correspond to respective temperatures in the liquid crystal television receiver and are specified by the image data of the current vertical period and the image data of the directly previous vertical period, the second table memories being referred to when the input image data is the video signal of the second broadcasting standard,

the enhancing conversion means including an operation section that performs, using the enhancing conversion parameter read out from one of the first and second table memories in accordance with the result of the detection by the signal type detection means and the result of the detection by the temperature detection means, an operation on the image data so as to enhance the image data.

11. (amended) The liquid crystal television receiver as defined in claim 1 or 2, further comprising control means that controls switching and selection of the enhancing conversion
5 parameters,

the control means including:

an operation section that performs, on temperature data detected by the temperature detection means, a predetermined operation corresponding to each signal type of
10 the input image data;

a threshold discriminating section that compares the temperature data, which has been subjected to the operation by the operation section, with predetermined threshold temperature data; and

15 a control signal output section that generates a switching control signal with which the enhancing conversion parameters are switched and controlled, in accordance with a result of comparison by the threshold discriminating section.

20 12. (amended) The liquid crystal television receiver as defined in claim 1 or 2, further comprising control means that controls switching and selection of the enhancing conversion parameters,

the control means including:

25 a threshold discriminating section that compares

temperature data, which is detected by the temperature detection means, with predetermined threshold temperature data; and

a control signal output section that generates a
5 switching control signal with which the enhancing conversion parameters are switched and controlled, in accordance with a result of comparison by the threshold discriminating section.

13. (amended) A liquid crystal display control method for
10 correcting optical response characteristics of a liquid crystal display panel, by subjecting image data supplied to the liquid crystal display panel to enhancing conversion at least in accordance with image data of a directly previous vertical period and image data of a current vertical period,

15 the liquid crystal panel being capable of reproducing images based on image data of more than one broadcasting standard,

the method comprising the steps of:

(i) detecting whether a signal type of input image data is
20 a video signal of a first broadcasting standard or a video signal of a second broadcasting standard, the video signal of the first broadcasting standard being different, in terms of a vertical frequency, from the video signal of the second broadcasting standard;

25 (ii) subjecting the image data to the enhancing

conversion in a direction of gray level transition;

(iii) detecting a temperature in an apparatus;

(iv) referring to table memories that store enhancing conversion parameters that correspond to respective
5 temperatures in the apparatus and are specified by the image data of the current vertical period and the image data of the directly previous vertical period; and

(v) in accordance with a comparison between a switching temperature determined by the signal type detected in the
10 step (i) and the temperature detected in the step (iii), performing an operation on the image data so as to enhance the image data, using the enhancing conversion parameter read out from one of the table memories.

15 14. (amended) A liquid crystal display control method for correcting optical response characteristics of a liquid crystal display panel, by subjecting image data supplied to the liquid crystal display panel to enhancing conversion at least in accordance with image data of a directly previous vertical
20 period and image data of a current vertical period,

the liquid crystal panel being capable of reproducing images based on image data of more than one broadcasting standard,

the method comprising the steps of:

25 (i) detecting whether a signal type of input image data is

a video signal of a first broadcasting standard or a video
signal of a second broadcasting standard, the video signal of
the first broadcasting standard being different, in terms of a
vertical frequency, from the video signal of the second
5 broadcasting standard;

(ii) subjecting the image data to the enhancing
conversion in a direction of gray level transition; and

(iii) detecting a temperature in an apparatus,

in the step (ii), the image data being subjected to the
10 enhancing conversion, using an enhancing conversion
parameter read out from one of table memories that is
selected and referred to in accordance with the result of
detection in the step (i) and the result of detection in the step
(iii), the table memories storing enhancing conversion
15 parameters that correspond to respective temperatures in the
apparatus and are specified by the image data of the current
vertical period and the image data of the directly previous
vertical period, and at least one of the table memories being
referable regardless of the signal type.

20

15. (cancelled)

16. (cancelled)

25

17. (amended) A liquid crystal display control method for

correcting optical response characteristics of a liquid crystal display panel, by subjecting image data supplied to the liquid crystal display panel to enhancing conversion at least in accordance with image data of a directly previous vertical period and image data of a current vertical period,

the liquid crystal panel being capable of reproducing images based on image data of more than one broadcasting standard,

the method comprising the steps of:

(i) detecting whether a signal type of input image data is a video signal of a first broadcasting standard or a video signal of a second broadcasting standard, the video signal of the first broadcasting standard being different, in terms of a vertical frequency, from the video signal of the second broadcasting standard;

(ii) subjecting the image data to the enhancing conversion in a direction of gray level transition;

(iii) detecting a temperature in an apparatus;

(iv) referring to a table memory that stores an enhancing conversion parameter specified by the image data of the directly previous vertical period and the image data of the current vertical period;

(v) performing an operation on the image data so as to enhance the image data, using the enhancing conversion parameter; and

(vi) multiplying output data as a result of the step (v) by a coefficient corresponding to the signal type detected in the step (i) and the temperature detected in the step (iii).

5 18. (amended) A liquid crystal display control method for correcting optical response characteristics of a liquid crystal display panel, by subjecting image data supplied to the liquid crystal display panel to enhancing conversion at least in accordance with image data of a directly previous vertical
10 period and image data of a current vertical period,

the liquid crystal panel being capable of reproducing images based on image data of more than one broadcasting standard,

the method comprising the steps of:

15 (i) detecting whether a signal type of input image data is a video signal of a first broadcasting standard or a video signal of a second broadcasting standard, the video signal of the first broadcasting standard being different, in terms of a vertical frequency, from the video signal of the second
20 broadcasting standard;

(ii) subjecting the image data to the enhancing conversion in a direction of gray level transition;

(iii) detecting a temperature in an apparatus;

(iv) referring to first table memory that stores an
25 enhancing conversion parameter specified by the image data

of the current vertical period and the image data of the directly previous vertical period, the first table memory being referred to in a case where the input image data is the video signal of the first broadcasting standard;

5 (v) referring to second table memory that stores an enhancing conversion parameter specified by the image data of the current vertical period and the image data of the directly previous vertical period, the second table memory being referred to in a case where the input image data is the
10 video signal of the second broadcasting standard;

(vi) in accordance with the signal type detected in the step (i), performing an operation on the image data so as to enhance the image data, using the enhancing conversion parameter read out from the first or second table memory;

15 and

(vii) multiplying output data as a result of the step (vi) by a coefficient corresponding to each temperature detected in the step (iii).

20 19 (amended) A liquid crystal display control method for correcting optical response characteristics of a liquid crystal display panel, by subjecting image data supplied to the liquid crystal display panel to enhancing conversion at least in accordance with image data of a directly previous vertical
25 period and image data of a current vertical period,

the liquid crystal panel being capable of reproducing images based on image data of more than one broadcasting standard,

the method comprising the steps of:

5 (i) detecting whether a signal type of input image data is a video signal of a first broadcasting standard or a video signal of a second broadcasting standard, the video signal of the first broadcasting standard being different, in terms of a vertical frequency, from the video signal of the second
10 broadcasting standard;

(ii) subjecting the image data to the enhancing conversion in a direction of gray level transition;

(iii) detecting a temperature in an apparatus;

(iv) referring to first table memories that store enhancing
15 conversion parameters that correspond to respective temperatures in the apparatus and are specified by the image data of the current vertical period and the image data of the directly previous vertical period, the first table memories being referred to in a case where the input image data is the
20 video signal of the first broadcasting standard;

(v) referring to second table memories that store enhancing conversion parameters that correspond to respective temperatures in the apparatus and are specified by the image data of the current vertical period and the image
25 data of the directly previous vertical period, the second table

memories being referred to in a case where the input image data is the video signal of the second broadcasting standard; and

(vi) in accordance with the signal type detected in the step (i) and the temperature detected in the step (iii), performing an operation on the image data so as to enhance the image data, using the enhancing conversion parameter read out from one of the first and second table memories.

10 20. (cancelled)

21. (amended) The method as defined in claim 13 or 14, further comprising the steps of:

(vi) performing, on temperature data corresponding to the temperature detected in the step (iii), a predetermined operation corresponding to each signal type of the input image data;

(vii) comparing the temperature after being subjected to the predetermined operation with predetermined threshold temperature data; and

(viii) in accordance with the comparison in the step (vii), generating a switching control signal for switching and controlling the enhancing conversion parameters.

25 22. (amended) The method as defined in claim 13 or 14,

further comprising the steps of:

(vi) comparing temperature data corresponding to the temperature detected in the step (iii) with predetermined threshold temperature data corresponding to each signal type
5 of the input image data; and

(vii) in accordance with the comparison in the step (vi), generating a switching control signal for switching and controlling the enhancing conversion parameters.

10 23. (amended) A program for a computer that controls a liquid crystal television receiver capable of reproducing images based on image data of more than one broadcasting standards, the liquid crystal television receiver correcting optical response characteristics of a liquid crystal display
15 panel by performing an enhancing conversion of image data supplied to the liquid crystal display panel, in accordance with image data of a directly previous vertical period and image data of a current vertical period, in such a manner as to causing the liquid crystal panel to have a transmittance
20 specified by the image data, within a predetermined period of time,

the program causing the computer to perform the steps defined in claim 13, 14, 17, 18, or 19.

25 24. (amended) A recording medium recording a program

for a computer that controls a liquid crystal television receiver capable of reproducing images based on image data of more than one broadcasting standards, the liquid crystal television receiver correcting optical response characteristics
5 of a liquid crystal display panel by performing an enhancing conversion of image data supplied to the liquid crystal display panel, in accordance with image data of a directly previous vertical period and image data of a current vertical period, in such a manner as to causing the liquid crystal panel to have
10 a transmittance specified by the image data, within a predetermined period of time,

the program causing the computer to perform the steps defined in claim 13, 14, 17, 18, or 19.